

rejection

Abstract of the Disclosure

A lighting assembly or a luminaire has a quasi point light source near a surface onto which light rays are to impinge. There is a lens system which includes a radially collimating first Fresnel lens at least partially surrounding the light source and collimating at least some of the light from the source to impinge upon the surface, and a second optical element, which may also be a Fresnel lens, for receiving light rays and directing the rays to impinge upon the surface at a position closer to the lens system than the rays from the first Fresnel lens. This provides more uniform lighting on the surface since the first Fresnel lens lighting impinges upon the surface at a distance from the assembly, and the second Fresnel lens provides fill in lighting between the assembly and the lighting of the first Fresnel lens.

Also, a lighting assembly is provided which has a quasi point light source near the surface onto which light rays are to impinge to provide light on the surface. Two canted lens ring segments at least partially surround the light source and collimate at least some of the light from the source to impinge upon the surface. These lenses each have an axis which is at an angle, to refract light rays from the source toward the surface. The lens ring segments may be

aspherical or may be Fresnel lens elements.

Another form of the invention provides a lighting assembly having a quasi point light source near at least one surface onto which light rays are to impinge to provide lighting. There are two radially collimating Fresnel ring lenses adjacent each other and a quasi point light source is common to these lenses and arranged in the vicinity where the lenses are closest to one another. In this arrangement the lenses are arranged at an angle with respect to one another.